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| 09/477,954      | 01/05/2000  | JONATHAN LEE SULLIVAN |                     | 9970             |

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| EXAMINER |
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PAPER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/477,954  
Filing Date: January 05, 2000  
Appellant(s): SULLIVAN, JONATHAN LEE

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Brian Kinnear  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 5/2/2007 appealing from the Office action mailed 9/25/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments Non-Final**

The appellant's statement of the status of amendments Non-final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: 2. CLAIMS 3, 4, 8, AND 9 UNPATENTABLE UNDER 35 U.S.C. § 103(A) AS OBVIOUS OVER INUBUSHI ET AL IN VIEW OF UNITED STATES PATENT 4,862,182 (EGASHIRA) FURTHER IN VIEW OF UNITED STATES PATENT 5,663,692 (SWOPE).

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

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|         |                 |        |
|---------|-----------------|--------|
| 5109539 | Inubushi et al. | 4-1992 |
| 4862182 | Egashira        | 8-1989 |
| 5663692 | Swope           | 9-1997 |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Inubushi et al. (U.S. Patent # 5,109,539).

Consider claim 5, Inubushi et al. clearly show and disclose a portable radio telephone wireless communication) device (fig. 4-6), comprising:

a housing 1 (figures 4 and 6, col.1, lines 31-34);

a transceiver circuit disposed within said housing 1 (not shown but inherent since a telephone conversation can be carried out with the device) (col.1, lines 45-51);

an internal antenna 10 disposed within said housing 1 (fig.4-5, col.1, lines 36-39);

and

an external, retractable antenna 8 movably mounted on said internal antenna 10 and being movable between a retracted position and an extended position with respect

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thereto (clearly shown in the front view of fig.4 and the right side view of fig.5, and col.1, lines 33-39);

said internal antenna 10 being in circuit with said transceiver circuit (inherent) when said external antenna 8 is in its said retracted position (col.1, lines 36-44);

said internal antenna 10 being out of circuit with said transceiver circuit (inherent) when said external antenna 8 is in its said extended position (col.1, lines 45-49);

said external antenna 8 being in circuit with said transceiver circuit (inherent) when in its said extended position (col.1, lines 45-49); and

said external antenna 8 being out of circuit with said transceiver circuit (inherent) when in its said retracted position (col.1, lines 36-44).

Consider claim 6, and as applied to claim 5 above, Inubushi et al. further show and disclose a change-over switch 11 (switching mechanism) (fig.5) that selectively connects either said external antenna 8 or said internal antenna 10 to said transceiver circuit (inherent) (col.1, lines 36-49).

Consider claim 7, and as applied to claim 5 above, Inubushi et al. also disclose that said internal and external antennas 10, 8 are electrically disconnected from one another at all times (fig.5-6, col.1, lines 34-36 and 40-49).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3, 4, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inubushi et al. (U.S. Patent # 5,109,539) in view of Egashira (U.S. Patent # 4,862,182) further in view of Swope (U.S. Patent #5,663,692).

Consider claims 3, 4, 8, and 9, and as applied to claims 5-7 above, Inubushi clearly show and disclose the claimed invention except a remote RF port, provided in said housing, which is mechanically connected to said internal antenna 10.

Egashira clearly shows and discloses a portable radiotelephone comprising, among other elements, a conductive tube 9 (fig.1, 2a, and 2b), provided in the housing of said portable radiotelephone, which is mechanically connected to sub-antenna element 10 (internal antenna) to allow reception of call signals from calling parties (fig.1, 2a, and 2b and col.3, line 20 to col. 4 line 19). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the device taught by Egashira into the device taught by Inubushi et al. for the purpose of enhancing the reception of calling signals.

Insubushi and Egashira fail to specifically disclose a remote RF port. However, Swope teaches a remote RF port (fig.1-2, remote RF port 113 or 213, col.2, lines 3-29). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the remote RF port taught by Swope into the device taught by Inubushi et al. and Egashira for the purpose of enhancing the reception of calling signals.

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4. Claims 10, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inubushi et al. (U.S. Patent # 5,109,539) in view of well known prior art (MPEP 2144.03) as applied in the previous Office Action.

Consider claim 10, Inubushi et al. clearly show and disclose a portable radio telephone (wireless communication) device (fig.4-6), comprising:

a housing 1 including a front housing member and a back housing member, said front and back housing member having upper and lower ends (fig.4-6, col.1 lines 31-34);

an internal antenna 10 positioned in said housing 1 adjacent said upper end of said back housing member (fig.4-5, col.1, lines 36-39); and

an external, retractable antenna 8 movably mounted on said internal antenna 10 and being movable between a retracted position and an extended position with respect thereto (clearly shown in the front view of fig.4 and the right side view of fig.5, and col.1, lines 33-39);

said internal antenna 10 being in circuit with a transceiver circuit (inherent) when said external antenna 8 is in its said retracted position (col.1, lines 36-44);

said internal antenna 10 being out of circuit with said transceiver circuit (inherent) when said external antenna 8 is in its said extended position (col.1, lines 45-49);

said external antenna 8 being in circuit with said transceiver circuit (inherent) when in its said extended position (col.1, lines 45-49); and

said external antenna 8 being out of circuit with said transceiver circuit (inherent) when in its said retracted position (col.1, lines 36-44).

However, Inubushi et al. do not specifically disclose that said transceiver circuit is in a printed circuit board (PCB) positioned in said housing 1 adjacent said front housing member.

Nonetheless, the Examiner takes Official Notice that it is notoriously well known in the art to place transceiver circuitry in a PCB positioned in a front portion of the housing of a wireless device for enhanced operation.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to slightly modify the device of Inubushi et al. with well known teachings in the art in order to place said transceiver circuit in a printed circuit board (PCB) positioned in said housing 1 adjacent said front housing member for enhanced operation.

Consider claim 12, and as applied to claim 10 above, Inubushi et al. further show and disclose a change-over switch 11 (switching mechanism) (figure 5) that selectively connects either said external antenna 8 or said internal antenna 10 to said transceiver circuit (inherent) (column 1 lines 36-49).

Consider claim 13, and as applied to claim 10 above, Inubushi et al. also disclose that said internal and external antennas 10, 8 are electrically disconnected from one another at all times (figures 5 and 6 and column 1 lines 34-36 and 40-49).

16. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inubushi et al. (U.S. Patent # 5,109,539) in view of well known prior art (MPEP 2144.03), as applied to claim 10 above, further in View of Egashira (U.S. Patent # 4,862,182), and further in view of Swope (U.S. Patent #5,663,692).



Consider claim 14, and as applied to claim 10 above, Inubushi et al., as modified above, clearly show and disclose the claimed invention except a remote RF port which is mechanically connected to said internal antenna 10.

Egashira clearly shows and discloses a portable radiotelephone comprising, among other elements, a conductive tube 9 (figures 1, 2a, and 2b), provided in the housing of said portable radiotelephone, which is mechanically connected to sub-antenna element 10 (internal antenna) to allow reception of call signals from calling parties (figures 1, 2a, and 2b and column 3 line 20 - column 4 line 19). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the device (conductive tube 9) taught by Egashira into the modified device taught by Inubushi et al. for the purpose of enhancing the reception of calling signals.

Insubushi and Egashira fail to specifically disclose a remote RF port. However, Swope teaches a remote RF port (fig.1-2, remote RF port 113 or 213, col.2, lines 3-29). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the remote RF port taught by Swope into the device taught by Inubushi et al. and Egashira for the purpose of enhancing the reception of calling signals.

#### ***Allowable Subject Matter***

5. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims as well as any corrections to the objections made above.

**(10) Response to Argument**

1. The applicant has ignored the non-final rejection mail 9/25/2006 in which claims 3-4 and 8-9 is rejected as being unpatentable over Inubushi, well-know, Egashira and further in view of Swop.

2. Regarding claims 5-7, 10, 12, and 13, Applicant argues, on pages 7 and 8 of the remarks, that Inubushi et al. do not disclose, teach, or suggest "an external, retractable antenna movably mounted on said internal antenna".

The Examiner respectfully disagrees with Applicant's argument because:

1) Element 20 in its entirety is not the antenna (see figure 2 of application). Specification mentions several examples that do not match the shape in figure 2 (element 20 is housing) (see page 4, lines 10-16).

2) Isolation of antennas show in figure 5 of Inubushi and figure 2 of the application is required for proper operation and element 9 in reference is a member for mounting the external antenna 8 to the housing and electrically connected it thereto.

3) As show in figure 3, there is an element in 20 guiding the external antenna, and the current claim language is broad enough to be met by fig.4-5 of Inubushi et al. Even though Inubushi et al. state that element 9 is a member for mounting the external antenna 8 to the housing and electrically connecting it thereto, fig.4-5 of Inubushi et al. clearly show that element 9 is mounted or is part of the internal antenna 10 and that the external, retractable antenna 8 passes through (i.e., movable) element 9

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and the internal antenna 10 during insertion and extraction. Based on these showings, Inubushi et al. meet the claimed limitation of the external, retractable antenna movably mounted on said internal antenna.

Regarding claims 3, 4, 8, 9, and 14, Applicant argues, on pages 8 and 9 of the remarks, that Egashira and Swope do not disclose, teach, or suggest "a remote RF port".

The Examiner respectfully disagrees with Applicant's argument because Egashira and Swope clearly discloses that when the main antenna element 1 (see Egashira, external, retractable antenna) is inside the case (see Egashira, i.e., retracted), the sub-antenna element 10 (see Egashira, internal antenna) is in contact with the conductive tube 9 to allow a call signal arriving from a calling party to be received by the sub-antenna element 10 (internal antenna) (see Egashira, figures 1, 2a, and 2b, column 3 lines 19-35, and col.3, lines 54 to col. 4 line 19). It is clear from Egashira's description that the device (see Egashira, conductive tube 9) functions as the claimed remote RF port (see Swope, fig.1-2, remote port 113 or 213, and switch accessory 100) that is mechanically connected (see Egashira, conductive tube 9), by the retraction of the main antenna element 1 (see Egashira, external, retractable antenna), to the sub-antenna element 10 (see Egashira, internal antenna) to allow reception of a call signal.

Additionally, Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact noticed (i.e., that is notoriously well known in the art to place transceiver circuitry in a printed circuit

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board (PCB) positioned in a front portion of the housing of a wireless device for enhanced operation).

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


Khai Nguyen 

Conferees:

Perez Gutierrez Rafael

Lester Kincaid

  
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SUPERVISORY PRIMARY EXAMINER

  
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8/15/07